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Wyo.'s new energy strategy proposes groundwater testing for oil and gas industry

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Wyoming Gov. Matt Mead (R) yesterday unveiled a new statewide energy strategy that proposes the oil and natural gas industry sample groundwater sources before drilling wells in an effort to better pinpoint pollution sources if contamination occurs.

The strategy, titled "Leading the Charge: Wyoming's Action Plan for Energy, Environment and Economy," outlines a broad set of 47 initiatives designed to keep the Cowboy State the nation's top coal and uranium producer, as well as one of the largest natural gas and oil producers in the United States, while also protecting the state's immense natural resources, particularly water.

The energy strategy calls for developing a statewide water strategy and management plan, as well as creating an inventory of state surface water sources that might be "available for industrial uses," according to the 63-page strategy. "This process will include data collection, analysis, recommendations, and identification of pre-siting locations where projects can be developed near available water," according to the plan.

It also calls for establishing identified corridors across state and federal lands for a network of carbon dioxide pipelines that could be used by the industry in enhanced oil recovery methods. Mead last year asked the Bureau of Land Management to preapprove a corridor of CO2 pipelines that would target an estimated 1.7 million barrels of oil that could be recovered from aging fields (*EnergyWire*, May 11, 2012).

All of the initiatives in the strategy are in the concept stage, said Shawn Reese, Mead's policy director. The directors of the various state agencies, including the Wyoming Oil and Gas Conservation Commission, "have been tasked with putting together proposals and plans for each of the initiatives," Reese said.

The energy resources that have made Wyoming the nation's top energy exporter "are vitally needed to fuel America's economy," Mead said yesterday during a conference call with reporters. "At the same time our treasures of nature are so important to all who live, work and find inspiration here. We cannot sit back and hope for the best. We need a strategy to strike the balance between energy development and environmental stewardship."

But it is the base-line groundwater testing that is likely to garner the most public attention in the state and across the West.

Mead for more than a year has discussed establishing base-line water quality sampling near drilling sites to help protect the industry and allay public fears about polluted drinking water.

But he stepped up efforts to do so in recent months, in part because of the ongoing situation playing out in Pavillion, Wyo., where suspected contamination from drilling operations has raised a firestorm of public concern.

U.S. EPA is studying whether drilling and hydraulic fracturing fluids contaminated drinking water in the Pavillion area. But the agency announced in January that it is delaying work on the issue by eight months. That angered residents and officials with Encana Corp., the main driller in the area, who want the matter cleared up once and for all (*E&ENews PM*, Jan. 10).

Mead said yesterday that the groundwater sampling was "one of the things that was important to me" to have in the plan.

"And the reason for that is, as we've worked through and on and with this issue in Pavillion, to me it was a good example of had we had base-line water testing at some point before activity started there, it would have prevented a lot of questions later on," he said.

A surprise for industry

Mead also left open the possibility of adding post-drilling groundwater monitoring, after wells have been in operation, to ensure the operations do not contaminate groundwater.

Colorado earlier this year become the first state to adopt regulations that require the industry to test groundwater and nearby water wells both before and after drilling begins (*EnergyWire*, Jan. 8).

"How do we do this in a way that is not just adding on but actually gets us to that point where we can say, 'Here's the water quality when we started, here's the development, and here's the water quality after the fact'?" Mead asked. "And then how do we go about it in a way also that if there is a problem, how do we identify it, isolate it and be able to address it more quickly than where we are now?"

The idea has the support of conservation groups like Sheridan, Wyo.-based Powder River Basin Resource Council, which earlier this year released a report outlining steps the state should implement to protect groundwater resources in the face of increased drilling activity.

"It's a good idea to know as much as we can about the water sources in the state to ensure they are protected," said Shannon Anderson, an organizer for the Powder River Basin Resource Council.

But while the oil and gas industry in Wyoming has generally supported the pre-drilling sampling proposal, word that Mead also wants the state to consider post-drilling sampling came as a surprise to John Robitaille, vice president of the Petroleum Association of Wyoming in Casper.

"To my knowledge we are not reviewing post-drilling testing," said Robitaille, whose trade group provided input during the energy strategy process. "The only thing we're in agreement on is pre-testing on existing water wells. We have not agreed on post-testing."

He said the industry would have to see a lot more information about any post-sampling plan.

"There is concern about post-sampling, simply because any groundwater reservoir is going to see natural variations of various constituents given the time of year. It just happens," he said. "It could be a certain constituent [level] rises in the spring and falls in the winter. What we are concerned about if we do a pre- and post-sample is if it's done at different times of the year, these natural variances could be misconstrued for something that really was not the result

of an operation, but rather Mother Nature doing her thing."

Striving for balance

Mead and his staff have been working on the statewide energy initiative for more than a year, and its main goal is to expand the state's energy-driven economy.

But Mead conceded that part of the motivation for developing the state energy strategy is ongoing frustration with the federal government and its land-use policies that Mead and other Western leaders say have hampered domestic energy production.

In Wyoming, the federal government manages more than 46,000 square miles of land in the state; the federal government also manages nearly two-thirds of the mineral estate in Wyoming.

"In beginning to think about the federal government and the amount of land that's owned by the federal government, and how important energy is to our country, it seems like to me that the federal government does not have a sound energy policy or an energy strategy, and that's problematic," Mead said. "But before we threw too many stones, I started thinking we in Wyoming need to have an energy strategy being the No. 1 exporter of energy, and so we began this process."

No one questions the sheer volume of Wyoming's energy resource. Coal producers last year hauled away via rail 397 million tons of coal to power plants in 37 states, and estimates indicate there are sufficient coal reserves in the state to keep producing at the current rate for the next 140 years. The state also produced 2.1 trillion cubic feet of natural gas in 2011, which was used by homes and businesses in 34 states.

The state's energy strategy calls for the increased production of compressed natural gas and liquefied natural gas "as a transportation fuel," according to the plan. The plan also calls for using forest waste as energy by removing dead trees from forests in Wyoming and "converting trees to fuel or salable products," which in turn could "provide an economic benefit to local communities."

The strategy also places a high priority on conserving, reclaiming and mitigating natural resources statewide.

And it calls for establishing a program that tracks individual energy companies and their performance "related to regulatory requirements," and rewards "operators who consistently meet state requirements, and it will offer incentives for good performance," according to the plan.

The plan also calls for devising conservation and mitigation strategies for the greater sage grouse, which is on the brink of becoming an endangered species. The strategy calls for developing "additional incentives" to encourage energy development outside core sage grouse habitat.

"Our collective charge is to power and fuel the economic well-being of our state and supply energy to the nation while protecting our environment," according to the strategy. "There are few things as important or challenging as accomplishing this mission."

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